

*Designing HIV Counseling and Testing Programs  
for Outreach Settings:  
New strategies to reach high risk populations.*

Freya Spielberg MD MPH

[fspielberg@rti.org](mailto:fspielberg@rti.org)

Presented by Caricia Catalani DrPH MPH

March 2010

# When Designing Testing Programs Meet the Needs of:

**Clients**

**Health  
Workers**

**Clinicians**

**CBOs**

**Health  
Departments**

**National**



# Agenda:

## Essential Questions for Outreach Programs

- Is mobile testing better at reaching the untested?
- What type of test is more acceptable, more effective and less costly?
- Should a rapid self-test be made available?
- Should face-to-face counseling be required?
- Can computer counseling be effective?
- Should we pay people to test?
- Does integrating HIV testing into a general computerized health assessment overcome HIV testing stigma?

# Research Highlighted in Talk

- **Mobile Outreach:**

- Demonstration Project (Seattle CBO, N=2155)

- **Testing Options:**

- Cluster RCT (Needle Exchange, Bathhouse, N= 80 days/site)
- Self-Testing Study (n=240)

- **Counseling Options:**

- RCT (Face-to-face counseling vs. written brochure, N=290)
- CARE tool demonstration projects (Mobile outreach, Urgent Care, HIV+)

- **Incentives:** Demonstration Project

- **Integrated outreach programs:**

- India Health Box Pilot (focus groups 6 villages)

*Mobile Outreach*  
*Better at reaching the untested?*

# Mobile Testing vs. Health Department Clinic Reaching Men of Color

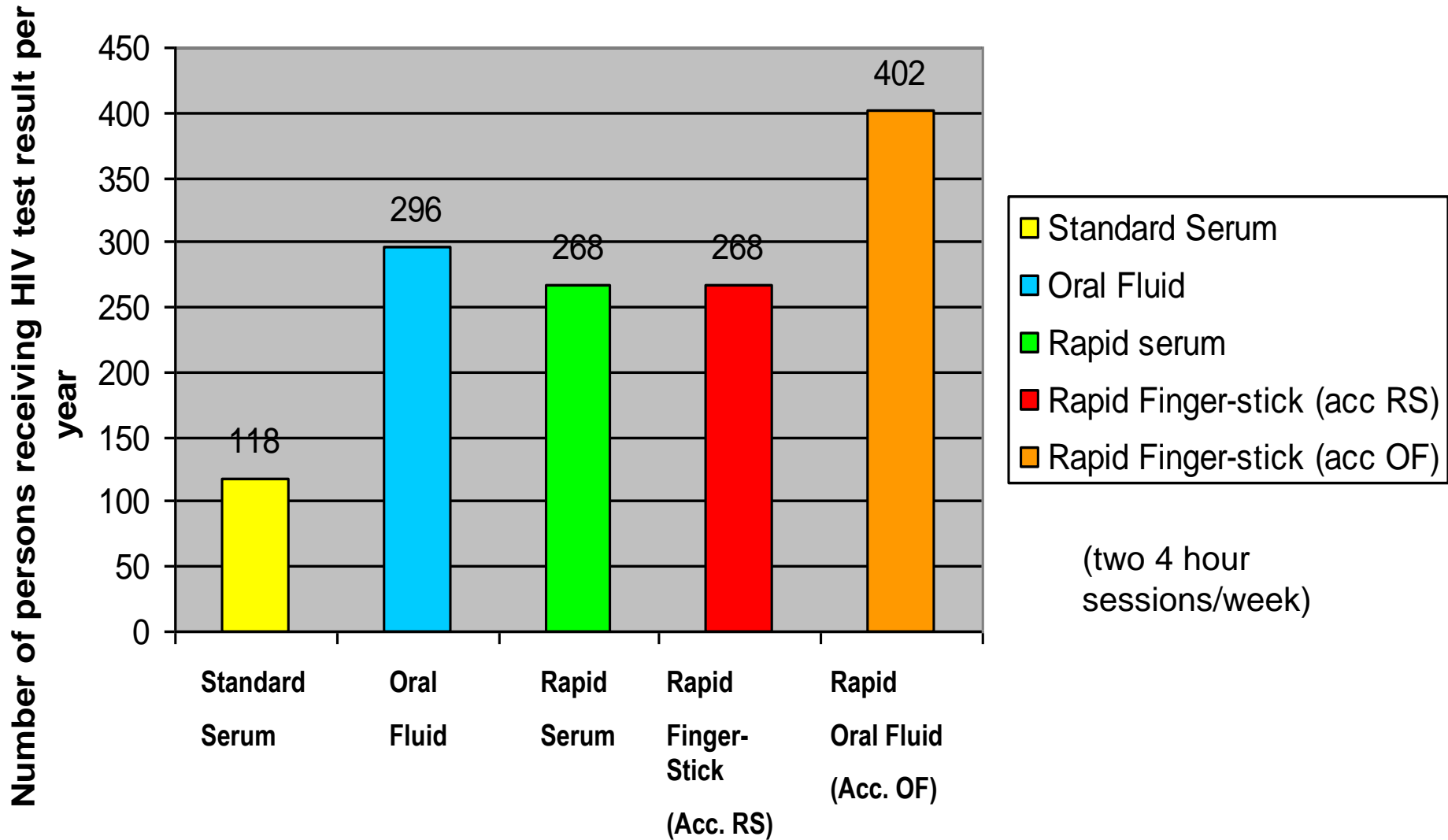
Characteristics	<u>CBO</u>	<u>HD</u>
<u>MSM of Color</u>	N=100 (%)	N= 239 (%)
Never Tested	28%	16%***
Age less than 20	16%	4%*
High School or less	44%	20%*
Unprotected Anal or Vaginal Sex (last test)	65%	54%
Unprotected Anal or Vaginal Sex (high,yr)	39%	18%*
Substance use (yr)	85%	29%*
HIV Positive	5(5%)	19(8%)

\* p< 0.001, \*\*\* p< 0.05

## *Testing Options*

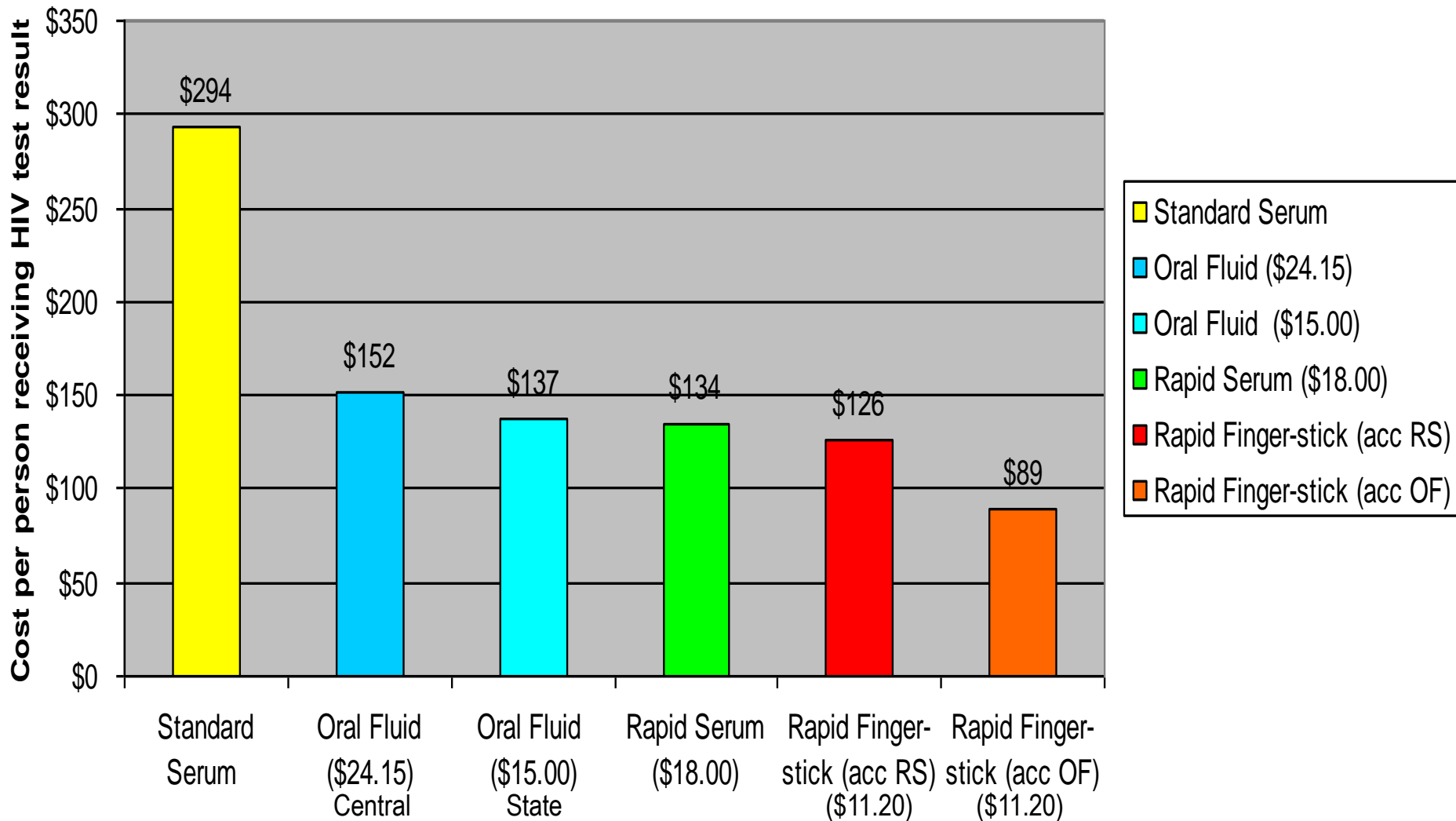
*Which strategy is more acceptable, more effective and least costly?*

# Number of persons receiving HIV test results at NE/yr





# Cost per person receiving HIV test result NE



## *Testing Options*

Should a rapid self-test be made available?

# Public Health Risk vs. Benefit

- Risks
  - **False negatives** – undiagnosed HIV
  - **False positives** – negative emotional reactions.
- Benefits
  - **Greater knowledge of HIV status** – decreased HIV incidence
  - **Early treatment** – Decreased morbidity, mortality, economic and psychological consequences.

# Will Over the Counter HIV testing Reach The Untested?

- Two survey studies among high risk (N=460, N=354), Seattle and San Francisco -OTC preferred by 20 to 24%<sup>1,2</sup>
- OTC significantly preferred by people who had never tested. <sup>1</sup>
- Qualitative research in India and South Africa, majority prefer self-testing due to stigma with clinic based testing
- In two self-testing studies: 1) Among 240 people with HIV, blinded accuracy was 96%; 2) Among 42 substance users, there were no false positive self tests, 5% were invalid and 95% were read correctly as negative. >60% preferred OTC over clinic testing.<sup>3,4</sup>
- Home Specimen Collection (HSC) post marketing study - 49% of 1494 HIV positive users had never tested before. <sup>5</sup>
- OTC preferred 20 to 24 times more than HSC<sup>1,2</sup>

**Conclusion:** It is likely that an OTC will reach a substantial number of people with HIV who have never tested before.

## *Counseling Options?*

Should face to face counseling be required?

# Results: RCT in NE (N=290)

## Face to Face vs. Written Materials

- 56% preferred written materials before randomization
- No difference in longitudinal risk behavior at 2 months by randomization arm
- Those who received their preferred strategy were significantly more likely to lower needle sharing risks over time (OR=7.2, p=0.001)

## *Counseling Options?*

Can computer counseling be effective?

# The Technology: Computerized Health Session

## General Health Tool

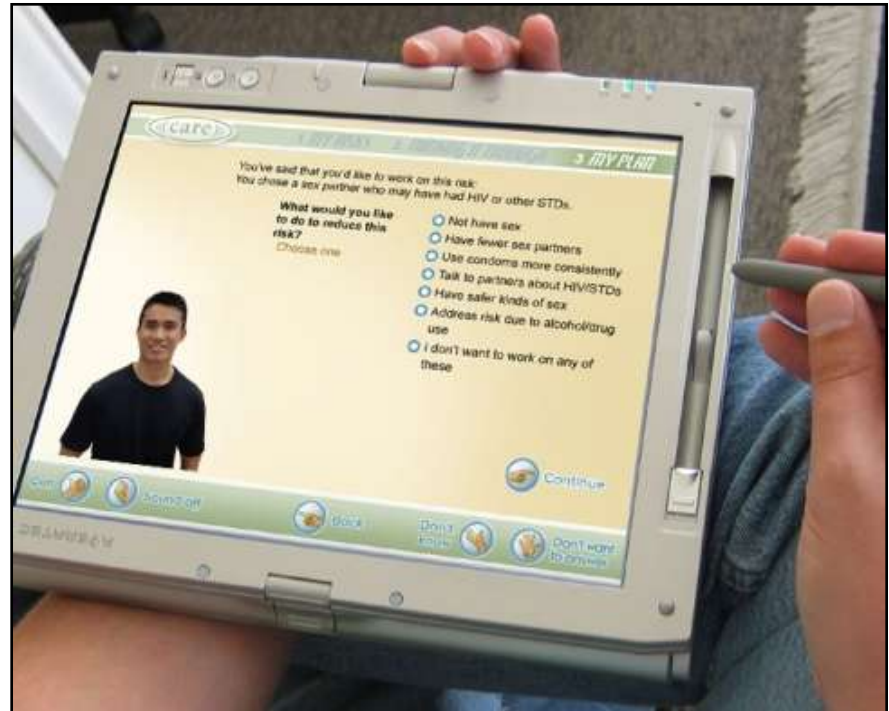
Counselor' selection

Test consent

Tailored feedback

Skills videos

Test, Meds, Product  
Recommendations





# The Technology: Computerized Health Session

General Health Tool

**Counselor' selection**

Test consent

Tailored feedback

Skills videos

Test, Meds, Product  
Recommendations



**care** CHOOSE A GUIDE To Stay Healthy

You are doing a great job using this tool. For your CARE session today please choose one of our staff to be your guide.

Quit Sound off Back Don't know Don't want to answer

# The Technology: Computerized Health Session

General Health Tool

Counselor' selection

**Test consent**

Tailored feedback

Skills videos

Test, Meds, Product  
Recommendations



**care**

We want to make sure that it's safe for you to get an HIV test today. Do you think that if you get a positive HIV test today, you would get yourself or others tested?

**Consent for HIV Testing**

**HIV (AIDS VIRUS) RAPID ANTIBODY TEST CONFIDENTIAL CONSENT FORM**

**Introduction (click to read)**  
Human immunodeficiency virus (HIV) is the cause of Acquired Immunodeficiency Syndrome (AIDS). All people infected with HIV can give it to others. There have had no method using condoms or shared needles you have with and should get an HIV test. People who test out that they have HIV can get medicine to help them stay healthy and can be careful not to infect others. Pregnant women who have HIV can take medicines so that their babies will not get HIV. Testing for HIV infection is your choice. Read or listen to the information below to help you understand what the test results mean.

**What the Test Means (click to read)**

**Benefits of Going Tested (click to read)**

**Risks and Disadvantages of Being Tested (click to read)**

**Privacy and Confidentiality (click to read)**

**Other Information (click to read)**

I have read and understood the above information. I have been told of the nature of the rapid HIV test, what various results would mean, and the benefits, risks, and disadvantages of being tested. I understand that I can choose not to be tested, I authorize testing staff to do this test and to give the results to me.

# The Technology: Computerized Health Session

General Health Tool

Counselor' selection

Test consent

**Tailored feedback**

Skills videos

Test, Meds, Product  
Recommendations



**care** 1 MY RISKS 2 THINKING IT THROUGH 3 MY PLAN

You've done a great job answering these questions, now lets think through your risks. Based on what you said, we can review what you are doing that is low risk, and what you are doing that might lead to getting an STD or HIV.

This is something you're doing to reduce your risk from HIV and STDs:

- Low risk** (Green circle): You've only chosen partners who tested negative for HIV.

These are some things that may increase your risk from HIV and STDs:

- Some risk** (Yellow triangle): You have not talked with all of your partners about HIV.
- High risk** (Red octagon): You are at very high risk for getting HIV based on having unprotected sex with an HIV positive person.
- High risk** (Red octagon): You are at very high risk of transmitting HIV based on sharing needles or works with someone of unknown or negative HIV status.

[Continue](#)

[Quit](#) [Sound off](#) [Back](#) [Don't know](#) [Don't want to answer](#)

# The Technology: Computerized Health Session

General Health Tool

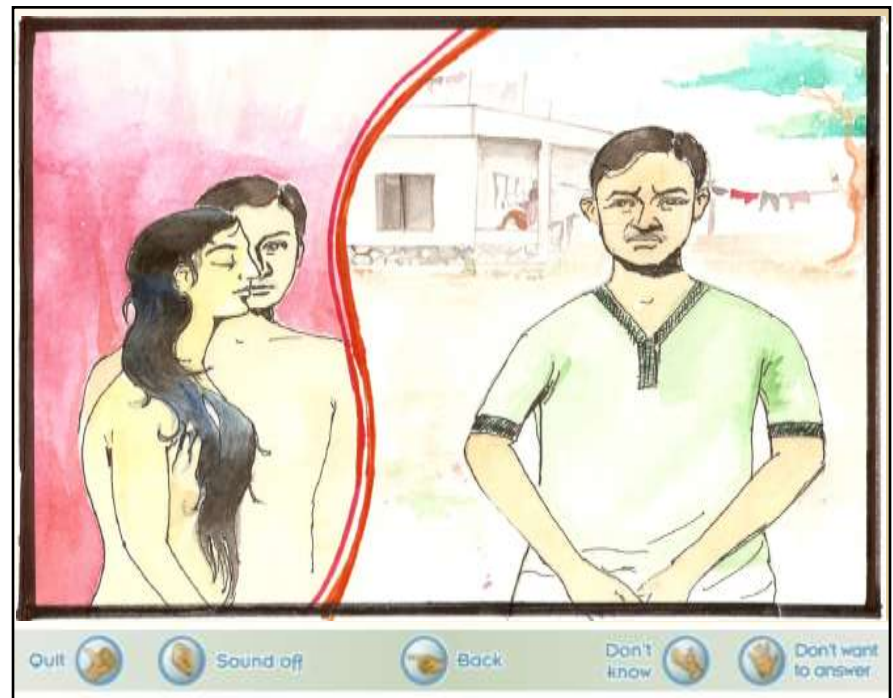
Counselor' selection

Test consent

Tailored feedback

**Skills videos**

Test, Meds, Product  
Recommendations



# The Technology: Computerized Health Session

General Health Tool

Counselor' selection

Test consent

Tailored feedback

Skills videos

**Test, Meds, Product  
Recommendations**



**care** 1 MY RISKS 2 THINKING IT THROUGH 3 MY PLAN

Right now we'll print an anonymous summary for you to keep. We'll also print out some resources that might be useful. If you'd like another copy to show to your provider or to leave with them to keep in your chart, click the "Print another copy" button. Otherwise, click "Next" to see other options.

Your Personalized Report  
This is an anonymous summary of what we discussed here for you to keep. Also we've printed a separate page of general resources that you might use in the future.  
Feedback From Your Questionnaire  
These are behaviors that put you at an increased risk for HIV / STDs:

- You are at very high risk for getting HIV based on having unprotected sex with an HIV positive person.
- You are at risk for getting HIV because you had unprotected sex with someone of unknown HIV status.
- You are at risk of getting HIV based on sharing needles or works with someone of unknown or positive HIV status.

Risk Reduction Plan  
For your risk reduction plan, "I'll use condoms with my main partner.", you chose to follow these steps:

Print Another Copy

Continue

Quit Sound off Back Don't know Don't want to answer

# Impact of Computer-Assisted Testing

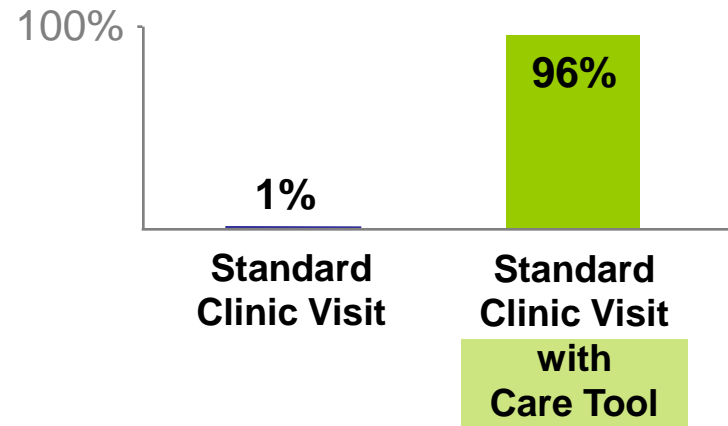
## US Urgent Care

US Mobile Testing

US HIV Clinic

## Knowledge of HIV Status

2007, RCT, n=239



## Cost

50% less than cost of counselor-based HIV testing

# Impact of Computer-Assisted Testing

US Urgent Care

**US Mobile Testing**

US HIV Clinic

## Knowledge of HIV Status

*2006-2007, Demonstration, n= 2155*

- 2155 people received counseling and HIV results
- 31 new people diagnosed with HIV
- For first time required program data submitted on time for reimbursement

## Cost

50% reduction in cost per test

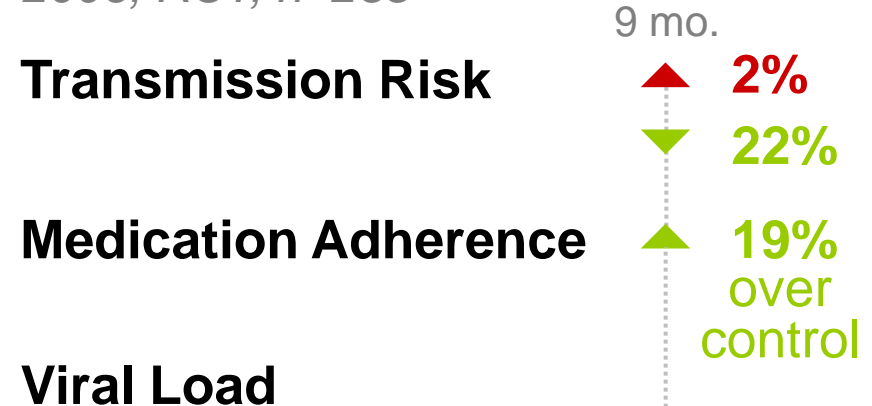
# Impact of Computer-Assisted Counseling

US Urgent Care  
US Mobile Testing

**US HIV Clinic**

## Impact on Behavior Change

2006, RCT, n=238





## *Incentives*

*Should we pay people to test?*

# Incentives in Mobile Outreach

- Incentives may overcome stigma
- If staff costs are fixed, offering incentive may be cost effective
- Mobile Outreach Demonstration
  - No incentive** (n=1199): Acceptance = 46%
  - \$10 incentive** (n=465): Acceptance = 94%

## *Integrated Outreach Services*

*Does integrating HIV testing into general health care overcome HIV testing Stigma?*

# In Public Urgent Care in US

- When HIV testing is offered through a slip of paper or through an HIV computer counseling tool:

**Acceptance = 15-16%**

- When HIV testing is offered through a general health care computer counseling tool:

**Acceptance = 37%**

# What people say at a Kiosk in India:

- HIV testing is important but I will not go to a testing site because people will think I did something bad.
- If HIV testing is offered in the kiosk by itself no one would come.
- If computer counseling is offered for a general health assessment, and HIV testing is offered with Diabetes testing people would be lined up down the street.

# Imagine a Health Outreach Worker ...





A comprehensive technology to guide health workers in:

- General Health Assessment
- Interactive Education
- Rapid Testing
- Algorithmic STI Treatment
- Triageed Referrals

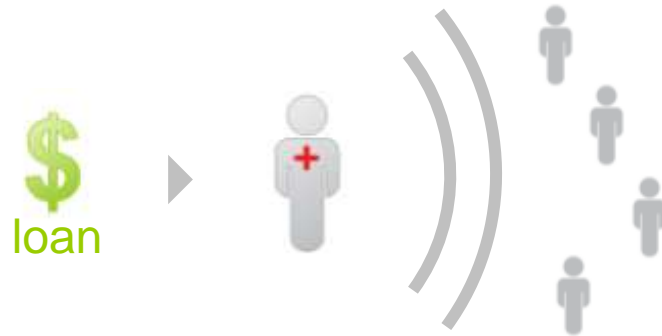
# How it Works



Health Worker receives a loan, training and HealthBox kit



# How it Works



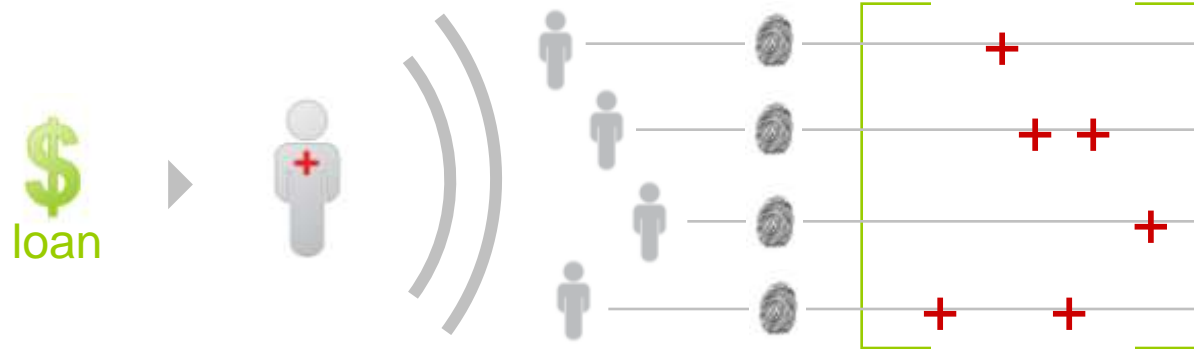
Health Worker offers free computerized general health assessment and health counseling to community

# How it Works



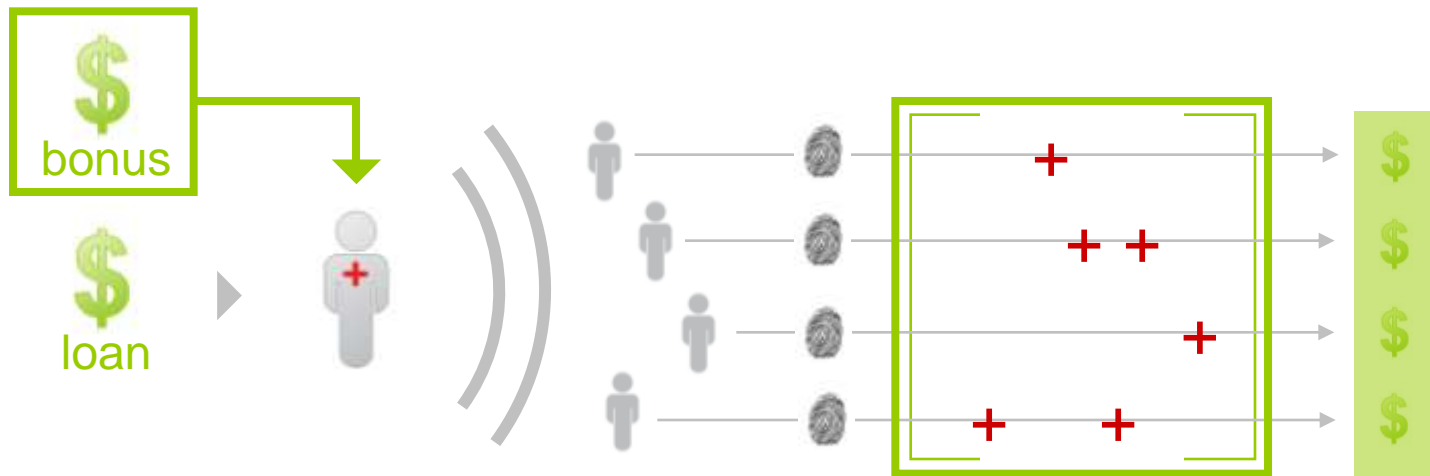
Finger print authentication for longitudinal care

# How it Works



Tool is offered to provide for assessment, counseling, testing, treatment, product recommendations, referrals guided by IT tool

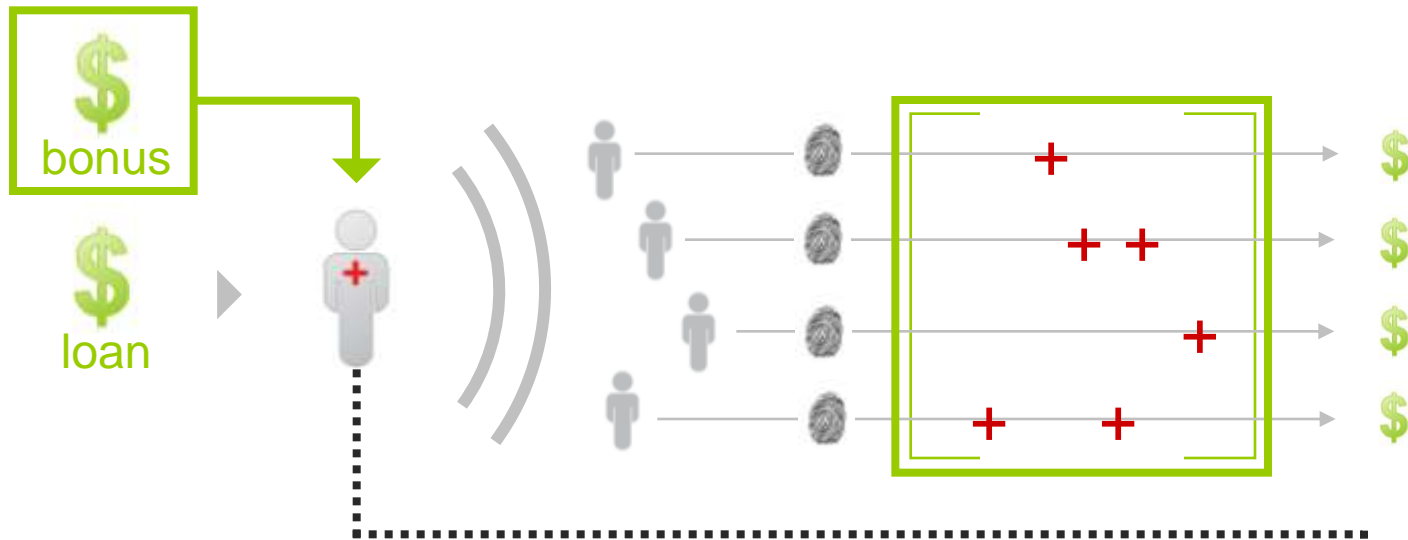
# How it Works



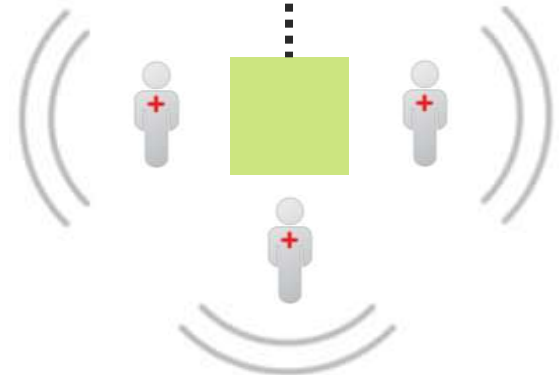
Clients self pay for tests, treatment, products not covered by government or donors.

Health Workers receive additional bonuses from global health donors for delivery of targeted services and connecting patients with chronic diseases to care.

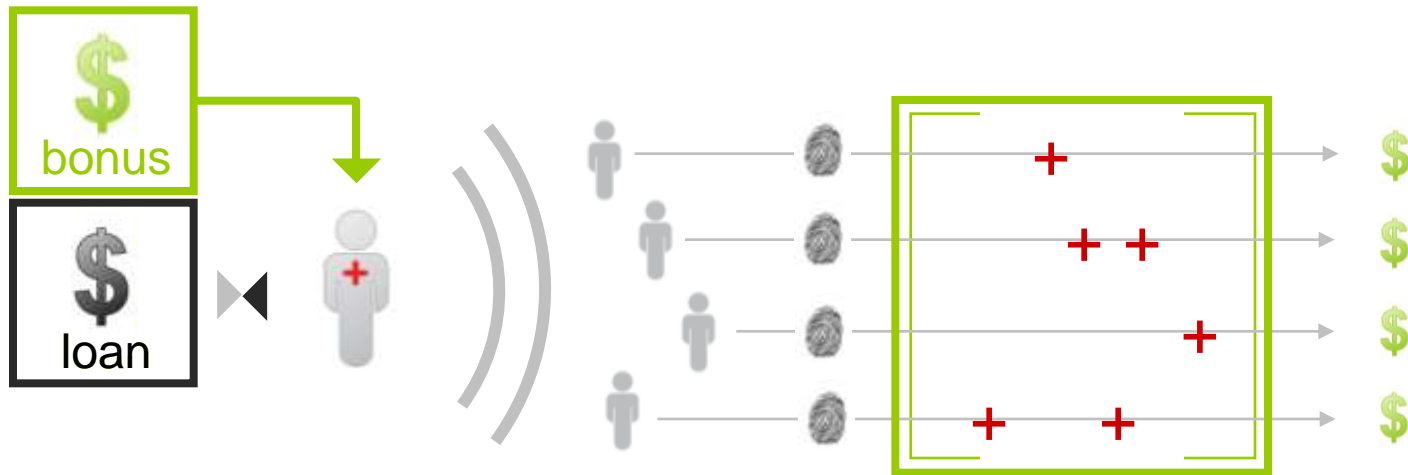
# How it Works



Community health workers return to kiosk for telemedicine, supplies, verification of services provided, data management



# How it Works



Loans repaid overtime from income generated

# Value Added

## Needs met for:

### **Patients**

Convenient accurate counseling, testing, care and referral

### **Health Workers**

Productivity based income, incentives for connecting people with care

### **Health Systems**

Automated quality assessment and evaluation data

### **Governments**

Surveillance data, healthy population, cost effective partnership

### **Biotech**

Clinical trials could be offered through network

# Conclusions – Designing an Outreach Program to Reach the Untested

- Use mobile outreach and CHW to reach those who do not go to clinics.
- Offer rapid point-of-care oral fluid or finger-stick testing and consider providing the option of self testing.
- Provide risk reduction counseling choices such as computer counseling, videos, or written brochures in addition to face-to-face counseling for those at risk.
- Consider offering incentives when testing staff are not fully utilized and when stigma is high.
- Consider integrating HIV testing into a general health assessment that also screens for Hypertension and Diabetes in communities where stigma is high.



# Acknowledgements/Contacts

## **CARE Content Development:**

Freya Spielberg MD MPH:

Ann Kurth, PhD

J. Dennis Fortenberry, MD, MS

C. Kevin Malotte, DrPH

## **CARE + Content Development:**

Ann Kurth PhD

## **CARE and CARE+ Programming:**

Resources Online: [www.ronline.com](http://www.ronline.com)

Jim Larkin, Tycen Hopkins

## **CARE India Content Development:**

Freya Spielberg MD MPH:

[fspielberg@rti.org](mailto:fspielberg@rti.org)

Deepa Kannan MD

Anu Sreevathsa MD

Reshma Vasanwala

Caricia Catalani PhD

## **General CARE Content Development**

Freya Spielberg MD MPH

## **CARE Kenya Content Development:**

Ann Kurth PhD